

PHOTOGRAPHY

FAQ

Q What are the benefits of different aspect ratios?

A An aspect ratio is the proportion of width to height that tells you the shape of an image. Compact digital cameras have a 4:3 aspect ratio sensor, which is the same as for most standard monitors (those with a 1,280x1,024 resolution have a 5:4 aspect ratio). Digital SLR cameras use 3:2 aspect ratio sensors, which matches the shape of 35mm film. Many compact cameras offer a 3:2 option, and sometimes a 16:9 (widescreen) option, too.

The benefit of these modes is purely aesthetic. However, it's worth bearing in mind that selecting these modes in compact cameras means trimming the top and bottom of the full-resolution image rather than adding extra pixels at the left and right. As a result, 3:2 and 16:9 photos will have a slightly lower resolution than 4:3 photos.

Ben Pitt

Music and photography expert

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OLYMPUS μ 770 SW

★★★★

£230 inc VAT

The μ 770 SW is designed to put up with rough treatment. It can survive being dropped up to 1½m, crushed by a 100kg weight, plunged 10m underwater and temperatures down to -10°C. This will give comfort to careless people who need a rugged camera, but also to cautious types who leave their camera at home for fear of damaging it.

It also means the 770 SW can be used for deliberate as well as accidental dips underwater. A manometer is built in to measure air or water pressure, so as you compose your shots, you can find out how many metres below – or hundreds of metres above – sea level you are. If you want to dive deeper than 10m, an underwater housing is available for around £160 that withstands depths of up to 40m. The only thing the 770 SW lacks is dust proofing. The integrated lens cover is a fairly standard sliding metal door that is liable to get clogged up with dust or sand. In this respect, the fixed glass window of Pentax's water- and dust-proof Optio W20 (*What's New, Shopper* March 2007) is a better design.

Otherwise, the 770 SW is a typical compact digital camera, although one we would expect to cost around £150. It's available in silver, blue or brown, and at 21mm at its widest point, falls squarely into the ultra-portable category. The 2½in screen has a generous 230,000-pixel resolution, while the 7-megapixel sensor should be more than enough for most people. However, there are a few less-impressive specifications. The skinny battery lasted for only 306 shots in our test, and the use of xD media means it's expensive to upgrade the paltry 18MB internal memory. As we've



noted before, xD is a slow performer, which results in the camera being able to capture only seven shots in continuous mode before it has to stop to wait for the xD card to catch up. In normal use, the camera captured a photo every 2½ seconds, but this rose to five seconds in low light. Browsing photos is particularly slow, and is spoilt by text information that appears each time you switch to a different photo.

Image quality had its ups and downs, but by today's high standards the downs were more noticeable. Focus and detail were average at best, but often trailed behind the other cameras we tested this month, particularly towards the edges of photos. High-ISO

shots didn't exhibit excessive noise, but noise reduction reduced detail still further. The automatic white balance coped badly with artificial light, and this was particularly frustrating because the preview image was often brighter and better balanced than the resulting image.

There's no doubt that the μ 770 SW's rugged design is an attractive proposition, but it needs to be built around a better camera to warrant our recommendation.

Ben Pitt

SUMMARY

- ✓ Waterproof and shockproof
- ✗ Disappointing image quality
- ✗ Expensive

DIGITAL CAMERA 7.1 megapixels (3,072x2,304), 3x optical zoom (38-114mm), xD slot (18MB internal), li-ion battery
PART CODE MJU770SW
SUPPLIER www.rankhour.com
DETAILS www.olympus.co.uk

PERFORMANCE (see page 58)



Also consider...

FUJIFILM FinePix F20 Zoom

★★★★★

£100 inc VAT



The FinePix F20 Zoom is a classy point-and-shoot camera that specialises in low-light photography. It produced excellent results at its ISO 400 setting, although shots were more varied at ISO 800 and above. Performance was also up to scratch, with just two seconds between shots. Most importantly, image quality was excellent, making this camera brilliant value.



DIGITAL CAMERA 6.1 megapixels (2,848x2,136), 3x optical zoom (35-108mm), xD slot (10MB internal), li-ion battery
PART CODE N0077830A
SUPPLIER www.amazon.co.uk
DETAILS www.fujifilm.co.uk
✓ Superb image quality
✗ Varying quality at high ISO settings
FULL REVIEW Feb 2007



CANON EOS 400D

★★★★★

£466 inc VAT



The successor to the hugely popular EOS 350D, Canon's EOS 400D is the best affordable digital SLR camera on the market. Incredibly fast focusing, a high capture rate and brilliant image quality from the 10.1-megapixel sensor all make it really hard not to love this camera. For photography enthusiasts who want to upgrade from a film SLR or compact camera, this is undoubtedly the model to get.



DIGITAL CAMERA 10.1 megapixels (3,888x2,592), 3x optical zoom (18-55mm), CompactFlash slot, li-ion battery
PART CODE 1237 B009AA
SUPPLIER www.onestop-digital.com
DETAILS www.canon.co.uk
✓ Fantastic image quality
✗ Finite continuous mode
FULL REVIEW Feb 2007



FUJIFILM FinePix F40fd

★★★★★

£170 inc VAT



FujiFilm's F31fd (reviewed in *What's New, Shopper* April 2007) is one of the best compact digital cameras we've seen, so we jumped at the chance to review the F40fd. The new model increases the megapixel count from 6.3 to 8.1 and, for the first time on a FujiFilm camera, includes an SD slot. This suggests that FujiFilm is finally facing up to the fact that xD media is slow and overpriced. However, an xD slot is incorporated as well for those upgrading from an older FujiFilm camera.

This gave us an opportunity to make some direct comparative tests of xD and SD's performance. Sure enough, continuous shooting fell from 0.43 to 0.37fps when switching from SD to xD media. However, both of these scores are poor, with other 8-megapixel cameras achieving 2fps. In Auto mode, the F40fd took around three seconds between shots, which is a little slow by today's standards. Battery life is above average at 415 shots in our test, although this is down from the 702 shots the F31fd managed.

The classy design closely resembles the F31fd, with a curved metal body, a 2½in 230,000-pixel screen and straightforward controls and menus. We're disappointed that it lacks the aperture and shutter-priority modes included in the F31fd, but the mode dial does have some other interesting options. Natural Light

uses ISO speeds up to 2,000 for low-light photography without the flash, while Natural & Flash takes two shots with and without the flash in quick succession, leaving you to choose the best when you get the pictures home. Picture Stabilisation uses high ISO and the flash together, which is useful for shooting larger scenes that the flash would otherwise struggle to illuminate. Two more dial positions provide quick access to Portrait and Landscape presets, but you can change these to any two others. Adjusting the mode dial reveals a short text description of each mode, so you're not just left to decipher the icons or delve into the manual.

Mode dials don't usually cause us much excitement, but by providing quick access to the more useful scene presets, this one offers tangible benefits to casual snappers. Meanwhile, a dedicated button activates face detection to assist with exposure and focus. This is increasingly common in digital cameras, but

FujiFilm's implementation is one of the best, detecting up to 10 faces and responding quickly to moving subjects.

Image quality is undoubtedly the F40fd's strongest asset. Pixel for pixel, images were considerably sharper and more detailed than from any of the other cameras reviewed this month, making this an 8-megapixel camera that offers significantly sharper pictures



than lower-resolution cameras. Noise was barely perceptible at ISO 400 and far from intrusive at ISO 800. Even ISO 1,600 gave acceptable results at times, although defined edges looked a little spidery at high magnification. Not once did the camera produce a badly exposed photo, and it excelled itself in controlling the highlights of high-contrast scenes. Video capture was also excellent, with sharp, noise-free image quality, smooth auto-exposure and ingenious use of the auto-focus assist light to give a bit of illumination in very dark conditions.

In some respects the F40fd is more like FujiFilm's Finepix F20 (see 'Also consider...' below) than the F31fd, with its lack of priority modes, smaller battery and top ISO speed of 1,600 (or 2,000 in some scene presets), although it does include the F31fd's face detection. However, for image detail, it offers significant improvements over both. The F31fd is currently available for just £147, while the F20 costs just £100, both of which are spectacularly good deals. However, at £170, the F40fd is just as appealing for those who value accessible scene presets over priority modes, don't demand very fast performance and want the best picture quality currently available from a compact digital camera.

Ben Pitt

SUMMARY

- ✓ Stunning image quality
- ✓ Beginner-friendly controls
- ✗ Mediocre performance

DIGITAL CAMERA 8.1 megapixels (3,296x2,472), 3x optical zoom (36-108mm), SD and xD slots (25MB internal), li-ion battery
PART CODE N079010A
SUPPLIER www.dabs.com
DETAILS www.fujifilm.co.uk

PERFORMANCE (see page 58)



PANASONIC Lumix DMC-FZ50

★★★★★

£330 inc VAT



Panasonic's Lumix DMC-FZ50 gives almost digital SLR performance on a much lower budget. The huge 12x optical stabilised zoom lens and 10-megapixel CCD allow you to get close to the action. Image quality is excellent at low ISO settings, but ISO 400 or higher produces grainy images. It's the best super-zoom digital camera on the market.



DIGITAL CAMERA 10 megapixels (3,648x2,736), 12x optical zoom (35-420mm), SD slot (32MB card supplied), li-ion battery

PART CODE PANLUMFZ50
SUPPLIER www.expansys.com
DETAILS www.panasonic.co.uk
✓ Fantastic handling; beautiful pictures in well-lit conditions
✗ Image quality slumps as ISO setting rises
FULL REVIEW Jan 2007



FUJIFILM FinePix S6500fd Zoom

★★★★★

£206 inc VAT



The S6500fd's zoom lens starts at 28mm for wide-angle photography, while a face-detection system helps you to focus and expose portraits of up to 10 people. High colour accuracy and detail make for excellent pictures, while low-light photography is excellent. This is an astounding camera for the price.



DIGITAL CAMERA 6.1 megapixels (2,848x2,136 pixels), 11x optical zoom, 10MB internal memory, xD slot, 4x AA (alkalines supplied) batteries

PART CODE N077950A
SUPPLIER www.savastore.com
DETAILS www.fujifilm.co.uk
✓ Fantastic image quality
✓ Very low noise at ISO 800
FULL REVIEW Mar 2007



CANON PowerShot A630

★★★★★

£150 inc VAT

Canon's PowerShot A630 is the first inexpensive camera we've seen to offer full photographic controls. It has a 4x zoom, 8-megapixel sensor and a full set of manual focus, exposure and priority modes.

The camera is easy to use, fast and has excellent image quality. The high quality and versatility are extraordinary at this price.



DIGITAL CAMERA 8.0 megapixels (3,264x2,448), 4x optical zoom (35-140mm), SDHC slot (16MB supplied), 4x AA batteries

PART CODE 12888007AA
SUPPLIER www.buyacamera.co.uk
DETAILS www.canon.co.uk
✓ Excellent image quality; full manual control
✗ Bulky
FULL REVIEW Jun 2007



CASIO Exilim Zoom EX-Z75

★★★

£138 inc VAT

We reviewed Casio's slender Z70 just four months ago (*What's New, Shopper* March 2007), but already its successor is available. There aren't many differences between the two models, with a choice of silver, blue or pink finishes and a larger screen (up from 2.5in to 2.6in) that's shaped like a 35mm film print (3:2 aspect ratio) rather than a computer screen (4:3; see the FAQ on page 30).

This screen shape has two advantages. When shooting at the standard 4:3 aspect ratio, the extra width is used to display a column of camera settings without needing to overlay them on top of the preview image. As a result, it's easy to see at a glance what the resolution, flash, ISO, white balance and various other options are set to, and it's quick to adjust them, too.

If you decide to take photos at a 3:2 aspect ratio, you can opt for a more conventional screen layout so that the preview image fills the screen, although this means that you'll have to resort to the menu system to access most settings. Having a large, wide screen is certainly fun, but its 115,000-pixel



resolution is disappointing, and it made colours appear washed out.

Performance is the EX-Z75's strongest area. It captures a picture in 1½ seconds from switching on and again every 1.6 seconds. However, image quality was less impressive. Colours were generally well balanced and vibrant but focus was below par, particularly towards the edges of photos. In some shots this merely drew attention towards the centre of the photo, but in others it created an odd motion blur-like effect that we found quite distracting. Noise was detectable even in very bright conditions, and affected dimly lit scenes quite badly.

The Z75 has a lot of charm, not least with its low price, but even more affordable cameras offer better image quality.

Ben Pitt

SUMMARY

- ✓ Fast performance
- ✓ Compact design
- ✗ Some problems with image quality

DIGITAL CAMERA 7.1 megapixels (3,072x2,304), 3x optical zoom (38-114mm), SDHC slot (8MB internal), li-ion battery
PART CODE EX-Z75SR
SUPPLIER www.rankhour.com
DETAILS www.casio.co.uk

PERFORMANCE (see page 58)



SONY CyberShot DSC-W55

★★★★

£133 inc VAT

We had high expectations of Sony's CyberShot DSC-W55. The CyberShot DSC-W30 (*Labs, Shopper* September 2006) was our favourite camera of 2006, and the W55 is newer, higher up Sony's range and costs less.

The two cameras are largely identical to look at, except that the W55 has a bigger 2.5in screen and is available in a range of colours. Inside, there's the predictable resolution rise from six to seven megapixels, but an increased internal memory capacity is the only other difference between the two cameras' specifications. Despite the higher resolution, the W55 is even faster than the W30, capturing a shot every 1.3 seconds. The continuous mode remains disappointing, being capable of capturing only four shots at 1fps.

In most of our test photos, the W55 lived up to the high standards set by its predecessor. Exposures displayed a satisfying balance of flattery and accuracy, with punchy colours and natural skin tones. Contrast was often greater than with the other cameras we tested, giving



more pleasing results but sometimes losing detail in the highlights. Still, this can be tamed with the dedicated Contrast option in the menu.

Noise was lower than average in low light and the 2cm macro focus gave some stunning close-ups. Focus and detail were up to scratch, but not noticeably better than the 6-megapixel W30.

Some photos were distinctly blurry as the auto-

focus occasionally failed to lock on to its subject accurately, particularly at telephoto zoom settings. The camera usually knew that it hadn't managed to focus, but it didn't report this back to us particularly clearly, leaving us to find out only after we got the pictures on the computer. It affected only around one in 10 photos, but that's enough to make us wary of recommending the W55.

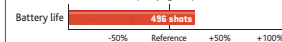
Ben Pitt

SUMMARY

- ✓ Fast performance
- ✓ Excellent colour accuracy
- ✗ Unreliable auto-focus

DIGITAL CAMERA 7.1 megapixels (3,072x2,304), 3x optical zoom (38-114mm), Memory Stick Pro Duo slot (56MB internal), li-ion battery
PART CODE DSCW55.CEH
SUPPLIER www.morecomputers.co.uk
DETAILS www.sony.co.uk

PERFORMANCE (see page 58)



CHOOSING AN... Ultra-Zoom Camera

Follow the steps to your ideal specs

RESOLUTION: 6 megapixels
ZOOM: 6x optical (35-210mm), no stabilisation
MONITORING: 2in, 115,000-pixel LCD screen
EXPOSURE MODES: Auto
SUPPLIED MEMORY: 10MB internal
BATTERIES: 2x AA disposable

Recommended minimum in grey

1 An ultra-zoom camera gives you more freedom to frame your photos in interesting ways, allowing you to shoot faraway or small subjects or zoom in on a particular area of a scene. A camera with the specifications shown above in grey is essentially a standard compact camera with a larger zoom than normal, but ultra-zoom cameras often come with other advanced features for creative photography.

2 Now six megapixels is an entry-level specification, resolution is fairly irrelevant. We've seen 6-megapixel cameras that capture more detail than 10-megapixel cameras. If you want to print enlargements, read our reviews to find out how much detail a camera is capable of providing.

3 A 6x zoom isn't bad, but many cameras offer 10x or 12x. However, while higher zoom settings magnify the image, they also magnify blur caused by camera shake, so optical image stabilisation is particularly useful for steadying shots. Most zooms start at a 35mm focal length, but lower values allow for wide-angle photography.

4 LCD screens of 2½in and larger are a treat to use, but they don't always offer more detail. Only the best ones have resolutions of 200,000 or more pixels. Many ultra-zoom cameras also include an electronic viewfinder (EVF), which is an additional LCD screen in lieu of an optical viewfinder.

5 Creative photographers should try to look out for aperture priority, shutter priority and manual exposure modes, and manual focus. High ISO speeds can be useful for low-light handheld photography, but only if reasonable image quality is maintained.

6 Bundled memory is always inadequate, so budget £15 for a 1GB memory card, and another £15 if the camera doesn't include rechargeable batteries.